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EXAMINER	
GUPTA, PARUL H	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/626,141	OSAKABE, KATSUICHI	
	Examiner	Art Unit	
	Parul Gupta	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 December 2006*.

2a)☒ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-10 and 12-20* is/are rejected.

7)☐ Claim(s) *4 and 11* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-20 are pending for examination as interpreted by the examiner. The arguments filed on 9/7/07 were also considered with the following results.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 2, 4, 8, 9, 11, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa, US Patent 6,704,269, in view of Yokoi et al., US Patent 5,732,062.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claim 1, Ogawa discloses an optical disk recording apparatus for forming pits (figure 2(b)) on a recording surface of an optical disk (element 10 of figure 1) of a given type at a given recording speed by applying a laser light (part of element 13 of figure 1) in the form of a sequence of multiple pulses obtained by intermittently turning on and off the laser light according to a given multi-pulse pattern (figure 2(a)),

the apparatus comprising: a write strategy circuit (figure 1, element 26) that is set with a pattern table (any one of Tables 1-5 of column 7 and see column 10, lines 13-19 and 23-31) and controls the turning on and off of the laser light according to a multi-pulse pattern ("recording strategies" of column 10, lines 14) selected from the pattern table in correspondence to a length of the pit to be formed (column 5, lines 5-28); a storage section (34) that stores a plurality of pattern tables (Tables 1-5 of column 7 and column 10, lines 13-19) of different kinds, each pattern table containing a plurality of multi-pulse patterns ("recording strategies" of column 10, line 14) corresponding to a plurality of lengths of the pit (column 5, lines 5-8) each of said plurality of multi-pulse patterns representing a sequence of multiple pulses of laser light effected by intermittently turning on and off the laser light (figure 2(a) and column 9, lines 37-42); and a control section (36) that selects one of the pattern tables based on either one or both of the 3recording speed and the type of the optical disk (column 10, lines 24-26), and that reads out the selected pattern table from the storage section and sets the read pattern table in the write strategy circuit (column 10, lines 23-31). Ogawa does not but Yokoi et al. teaches that the multiple pulses of laser light are used for forming a single pit (figures 5, 7, 17, and 37). It would have been obvious to one of ordinary skill in the art at the time of the invention to specify that the multiple pulses of laser light are used for forming a single pit as taught by Yokoi et al. into the system of Ogawa. The motivation would be to have a range of powers that perform different functions to accurately and efficiently record to the media (column 1, lines 47-65).

Regarding claim 8, Ogawa discloses an optical disk recording apparatus for forming pits (figure 2(b)) on a recording surface of an optical disk (element 10 of figure 1) of a given type at a given recording speed by applying a laser light (part of element 13 of figure 1) in the form of a sequence of multiple pulses obtained by intermittently turning on and off the laser light according to a given multi-pulse pattern (column 9, lines 37-42) while rotating the optical disk at a constant angular velocity such that a linear velocity of the optical disk varies (thus, settings are dictated by the linear velocity as given in column 10, lines 16-20), the apparatus comprising: a write strategy circuit (figure 1, element 26) that is set with a pattern table (any one of Tables 1-5 of column 7 and see column 10, lines 13-19 and 23-31) and controls the turning on and off of the laser light according to a multi-pulse pattern selected from the pattern table in correspondence to a length of the pit to be formed (column 5, lines 5-28); a storage section (34) that stores a plurality of pattern tables (any one of Tables 1-5 of column 7) of different kinds, each pattern table containing a plurality of multi-pulse patterns ("recording strategies" of column 10, line 14) corresponding to a plurality of lengths of the pit (column 5, lines 5-8), each of said plurality of multi-pulse patterns representing a sequence of multiple pulses of laser light effected by intermittently turning on and off the laser light (column 9, lines 37-42); and a control section (36) that selects one of the pattern tables based on either one or both of the recording speed and the type of the optical disk (column 10, lines 24-26), and that reads out the selected pattern table from the storage section and sets the read pattern table in the write strategy circuit (column 10, lines 23-31). Ogawa does not but Yokoi et al. teaches that the multiple pulses of

laser light are used for forming a single pit (figures 5, 7, 17, and 37). It would have been obvious to one of ordinary skill in the art at the time of the invention to specify that the multiple pulses of laser light are used for forming a single pit as taught by Yokoi et al. into the system of Ogawa. The motivation would be to have a range of powers that perform different functions to accurately and efficiently record to the media (column 1, lines 47-65).

Regarding claim 15, Ogawa discloses in column 10 a method of forming pits on a recording surface of an optical disk of a given type at a given recording speed (lines 13-20) by applying a laser light (part of element 13 of figure 1) in the form of a sequence of multiple pulses obtained by intermittently turning on and off the laser light according to a given multi-pulse pattern (column 9, lines 37-42), the method comprising: a write strategy process (done by "recording signal modification circuit of lines 28-29) settable with a pattern table (any one of Tables 1-5 of column 7 and see column 10, lines 13-19 and 23-31) and capable of controlling the turning on and off of the laser light according to a multi-pulse pattern ("recording strategies" of line 14) selected from the pattern table in correspondence to a length of the pit to be formed (column 5, lines 5-28); a storage process (done by element 34 of figure 1) of storing a plurality of pattern tables of different kinds in a storage, each pattern table containing a plurality of multi-pulse patterns ("recording strategies" of line 14) corresponding to a plurality of lengths of the pit (column 5, lines 5-8), each of said plurality of multi-pulse patterns representing a sequence of multiple pulses of laser light effected by intermittently turning on and off the laser light (column 9, lines 37-42); and a control process (done by element 36 of figure

1) of selecting one of the pattern tables based on either one or both of the recording speed and the type of the optical disk (lines 24-26), and that reads out the selected pattern table from the storage section and sets the read pattern table in the write strategy circuit (lines 23-31). Ogawa does not but Yokoi et al. teaches that the multiple pulses of laser light are used for forming a single pit (figures 5, 7, 17, and 37). It would have been obvious to one of ordinary skill in the art at the time of the invention to specify that the multiple pulses of laser light are used for forming a single pit as taught by Yokoi et al. into the system of Ogawa. The motivation would be to have a range of powers that perform different functions to accurately and efficiently record to the media (column 1, lines 47-65).

Regarding claim 16, Ogawa discloses in column 10 a method of forming pits on a recording surface of an optical disk of a given type at a given recording speed (lines 13-20) by applying a laser light in the form of a sequence of multiple pulses obtained by intermittently turning on and off the laser light according to a given multi-pulse pattern (column 9, lines 37-42) while rotating the optical disk at a constant angular velocity such that a linear velocity of the optical disk varies relative to a spot of the laser light (thus, settings are dictated by the linear velocity as given in column 9, lines 31-37), the method comprising: a write strategy process (done by "recording signal modification circuit of lines 28-29) settable with a pattern table (any one of Tables 1-5 of column 7 and see column 10, lines 13-19 and 23-31) and capable of controlling the turning on and off of the laser light according to said linear velocity and a multi-pulse pattern ("recording strategies" of line 14) selected from the pattern table (any one of Tables 1-5

of column 7) in correspondence to a length of the pit to be formed (column 5, lines 5-28); a storage process (done by element 34 of figure 1) of storing a plurality of pattern tables of different kinds in a storage, each pattern table containing a plurality of multi-pulse patterns (lines 13-16) corresponding to a plurality of lengths of the pit (column 5, lines 5-54), each of said plurality of multi-pulse patterns representing a sequence of multiple pulses of laser light effected by intermittently turning on and off the laser light (column 9, lines 37-42); and a control process (done by element 36 of figure 1) of selecting one of the pattern tables based on either one or both of the recording speed and the type of the optical disk (column 10, lines 24-26), and that reads out the selected pattern table from the storage section and sets the read pattern table in the write strategy circuit (column 10, lines 23-31).

Regarding claim 17, Ogawa teaches a computer-readable medium (inherent to method of claim 15), encoded with a computer program for use in an optical disk recording apparatus designed for forming pits on a recording surface of an optical disk of a given type at a given recording speed (column 10, lines 13-20) by applying a laser light in the form of a sequence of multiple pulses obtained by intermittently turning on and off the laser light according to a given multi-pulse pattern (column 9, lines 37-42), the program being executable by the optical disk recording apparatus for performing a method comprising: a write strategy process (done by "recording signal modification circuit of column 10, lines 28-29) settable with a pattern table (any one of Tables 1-5 of column 7 and see column 10, lines 13-19 and 23-31) and capable of controlling the turning on and off of the laser light according to a multi-pulse pattern ("recording

strategies" of column 10, line 14) selected from the pattern table (any one of Tables 1-5 of column 7) in correspondence to a length of the pit to be formed (column 5, lines 5-28); a storage process (done by element 34 of figure 1) of storing a plurality of pattern tables of different kinds in a storage, each pattern table containing a plurality of multi-pulse patterns (column 10, lines 13-16) corresponding to a plurality of lengths of the pit (column 5, lines 5-54), each of said plurality of multi-pulse patterns representing a sequence of multiple pulses of laser light effected by intermittently turning on and off the laser light (column 9, lines 37-42); and a control process (done by element 36 of figure 1) of selecting one of the pattern tables based on either one or both of the recording speed and the type of the optical disk (column 10, lines 24-26), and that reads out the selected pattern table from the storage section and sets the read pattern table in the write strategy circuit (column 10, lines 23-31). Ogawa does not but Yokoi et al. teaches that the multiple pulses of laser light are used for forming a single pit (figures 5, 7, 17, and 37). It would have been obvious to one of ordinary skill in the art at the time of the invention to specify that the multiple pulses of laser light are used for forming a single pit as taught by Yokoi et al. into the system of Ogawa. The motivation would be to have a range of powers that perform different functions to accurately and efficiently record to the media (column 1, lines 47-65).

Regarding claim 18, Ogawa teaches a computer-readable medium (inherent to method of claim 16), encoded with a computer program for use in an optical disk recording apparatus designed for forming pits on a recording surface of an optical disk of a given type at a given recording speed (column 10, lines 13-20) by applying a laser

light in the form of a sequence of multiple pulses obtained by intermittently turning on and off the laser light according to a given multi-pulse pattern (column 9, lines 37-42) while rotating the optical disk at a constant angular velocity such that a linear velocity of the optical disk varies relative to a spot of the laser light (thus, settings are dictated by the linear velocity as given in column 9, lines 31-37), the program being executable by the optical disk recording apparatus for performing a method comprising: a write strategy process (done by "recording signal modification circuit of column 10, lines 28-29) settable with a pattern table (any one of Tables 1-5 of column 7 and see column 10, lines 13-19 and 23-31) and capable of controlling the turning on and off of the laser light according to a multi-pulse pattern ("recording strategies" of column 10, line 14) selected from the pattern table (any one of Tables 1-5 of column 7) in correspondence to a length of the pit to be formed (column 5, lines 5-28); a storage process (done by element 34 of figure 1) of storing a plurality of pattern tables of different kinds in a storage, each pattern table containing a plurality of multi-pulse patterns (column 10, lines 13-16) corresponding to a plurality of lengths of the pit (column 5, lines 5-54), each of said plurality of multi-pulse patterns representing a sequence of multiple pulses of laser light effected by intermittently turning on and off the laser light (column 9, lines 37-42); and a control process (done by element 36 of figure 1) of selecting one of the pattern tables based on either one or both of the recording speed and the type of the optical disk (column 10, lines 24-26), and that reads out the selected pattern table from the storage section and sets the read pattern table in the write strategy circuit (column 10, lines 23-31). Ogawa does not but Yokoi et al. teaches that the multiple pulses of

laser light are used for forming a single pit (figures 5, 7, 17, and 37). It would have been obvious to one of ordinary skill in the art at the time of the invention to specify that the multiple pulses of laser light are used for forming a single pit as taught by Yokoi et al. into the system of Ogawa. The motivation would be to have a range of powers that perform different functions to accurately and efficiently record to the media (column 1, lines 47-65).

Regarding claim 19, Ogawa discloses a system for forming pits (figure 2(b)) on a recording surface of an optical disk of a given type at a given recording speed (column 10, lines 13-20) by applying a laser light in the form of a sequence of multiple pulses obtained by intermittently turning on and off the laser light according to a given multi-pulse pattern (column 9, lines 37-42), the system comprising: an optical disk (element 10 of figure 1); and a disk recording apparatus, said apparatus comprising: a write strategy circuit (figure 1, element 26) that is set with a pattern table (any one of Tables 1-5 of column 7 and see column 10, lines 13-19 and 23-31) and controls the turning on and off of the laser light according to a multi-pulse pattern ("recording strategies" of column 10, line 14) selected from the pattern table in correspondence to a length of the pit to be formed (column 5, lines 5-54), a storage section (done by element 34 of figure 1) that stores a plurality of pattern tables (any one of Tables 1-5 of column 7) of different kinds, each pattern table containing a plurality of multi-pulse patterns ("recording strategies" of column 10, line 14) corresponding to a plurality of lengths of the pit (column 5, lines 5-28), each of said plurality of multi-pulse patterns representing a sequence of multiple pulses of laser light effected by intermittently turning on and off the

laser light (column 9, lines 37-42), and a control section (done by element 36 of figure 1) that selects one of the pattern tables based on either one or both of the recording speed and the type of the optical disk (column 10, lines 24-26), and that reads out the selected pattern table from the storage section and sets the read pattern table in the write strategy circuit (column 10, lines 23-31). Ogawa does not but Yokoi et al. teaches that the multiple pulses of laser light are used for forming a single pit (figures 5, 7, 17, and 37). It would have been obvious to one of ordinary skill in the art at the time of the invention to specify that the multiple pulses of laser light are used for forming a single pit as taught by Yokoi et al. into the system of Ogawa. The motivation would be to have a range of powers that perform different functions to accurately and efficiently record to the media (column 1, lines 47-65).

Regarding claim 20, Ogawa teaches a system for forming pits (figure 2(b)) on a recording surface of an optical disk of a given type at a given recording speed (column 10, lines 13-20) by applying a laser light in the form of a sequence of multiple pulses obtained by intermittently turning on and off the laser light according to a given multi-pulse pattern (column 9, lines 37-42) while rotating the optical disk at a constant angular velocity such that a linear velocity of the optical disk varies (thus, settings are dictated by the linear velocity as given in column 9, lines 31-37), the apparatus comprising, the system comprising: an optical disk (element 10 of figure 1); and a disk recording apparatus, said apparatus comprising: a write strategy circuit (figure 1, element 26) that is set with a pattern table (any one of Tables 1-5 of column 7 and see column 10, lines 13-19 and 23-31) and controls the turning on and off of the laser light according to a

multi-pulse pattern ("recording strategies" of column 10, line 14) selected from the pattern table in correspondence to a length of the pit to be formed (column 5, lines 5-28), a storage section (done by element 34 of figure 1) that stores a plurality of pattern tables (any one of Tables 1-5 of column 7) of different kinds, each pattern table containing a plurality of multi-pulse patterns ("recording strategies" of column 10, line 14) corresponding to a plurality of lengths of the pit (column 5, lines 5-54), each of said plurality of multi-pulse patterns representing a sequence of multiple pulses of laser light effected by intermittently turning on and off the laser light (column 9, lines 37-42), and a control section (done by element 36 of figure 1) that selects one of the pattern tables based on either one or both of the recording speed and the type of the optical disk (column 10, lines 24-26) and based on the varying linear velocity of the optical disk (thus, settings are dictated by the linear velocity as given in column 9, lines 31-37), and that reads out the selected pattern table from the storage section and sets the read pattern table in the write strategy circuit (column 10, lines 23-31). Ogawa does not but Yokoi et al. teaches that the multiple pulses of laser light are used for forming a single pit (figures 5, 7, 17, and 37). It would have been obvious to one of ordinary skill in the art at the time of the invention to specify that the multiple pulses of laser light are used for forming a single pit as taught by Yokoi et al. into the system of Ogawa. The motivation would be to have a range of powers that perform different functions to accurately and efficiently record to the media (column 1, lines 47-65).

Regarding claims 2 and 9, Ogawa teaches in figure 1 the optical disk recording apparatus according to claims 1 and 8, respectively, wherein the storage section (34) stores the plurality of the pattern tables (any one of Tables 1-5 of column 7) in correspondence to a plurality of basic cycles of turning on and off the laser light (column 9, lines 37-42), such that each pattern table contains the plurality of the multi-pulse patterns ("recording strategies" of column 10, line 14), all of which are arranged according to the basic cycle allotted to each pattern table (settings within storage unit are given in column 10, lines 16-19) and in matching with the plurality of the lengths of the pit (column 5, lines 5-54).

3. Claims 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa in view of Yokoi et al., further in view of Hara, US Patent 6,044,055.

Ogawa teaches the limitations of the given write methods of claims 1 and 8, but does not teach the further limitations of claims 6 and 13.

Regarding claim 6, Hara teaches the optical disk recording apparatus, wherein the storage section stores the multi-pulse patterns that have cycles of turning on and off the laser light ranging from 0.5T cycle through 3T cycle (figure 6).

Regarding claim 13, Hara teaches the optical disk recording apparatus, wherein the storage section stores the multi-pulse patterns that have cycles of turning on and off the laser light ranging from 0.5T cycle through 3T cycle (figure 6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the concept of the broader range as taught by Hara into the system of Ogawa in view of Yokoi et al. This would serve the purpose of allowing recording

compensation to be performed easily in accordance with the linear velocity (column 5, lines 8-11 of Hara).

4. Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa in view of Yokoi et al. in view of Hara in view of Kobayashi et al., US Patent 5,367,514.

Ogawa in view of Hara teaches the limitations of claims 6 and 14, but fails to teach the further limitations of claims 7 and 14. In addition, Hara teaches in figure 6 patterns having a cycle of 0.5T to 1.5T, but fails to explicitly explain that the apparatus is used for test recording.

Regarding claim 7, Kobayashi et al. teaches the optical disk recording apparatus, wherein the control section performs different sessions of test recording (column 13, lines 47-59) separately from each other with using the respective multi-pulse patterns having the cycles ranging from 1.5T through 3T (column 14, lines 52-64) to evaluate respective qualities of the different sessions of the test recording before an actual recording, and selects one of the multi-pulse patterns having the cycles ranging from 1.5T through 3T based on the respective qualities evaluated by the different sessions of the test recording (column 14, lines 52-64).

Regarding claim 14, Kobayashi et al. teaches the optical disk recording apparatus, wherein the control section performs different sessions of test recording (column 13, lines 47-59) separately from each other with using the respective multi-pulse patterns having the cycles ranging from 1.5T through 3T (column 14, lines 52-64) to evaluate respective qualities of the different sessions of the test recording before an

actual recording, and selects one of the multi-pulse patterns having the cycles ranging from 10.5T through 3T based on the respective qualities evaluated by the different sessions of the test recording (column 14, lines 52-64).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the concept of test recording with the given cycles as taught by Kobayashi et al. into the system of Ogawa in view of Yokoi et al in view of Hara. The motivation would be to accurately calibrate the laser using values that are given as conventional (column 14, lines 45-51 of Kobayashi et al.).

5. Claims 3, 5, 10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa in view of Yokoi et al. in view of Kobayashi et al.

Ogawa teaches the limitations of claims 2, 4, 9, and 11, but fails to teach the further limitations of claims 3, 5, 10, and 12. In addition, Ogawa teaches separating the pattern tables based on the mark lengths.

Regarding claim 3, Kobayashi et al. teaches the optical disk recording apparatus, wherein the storage section (element 49 of figure 25) stores a 1T pattern table corresponding to a pattern table of the basic cycle of 1T, so that the 1T pattern table enables the write strategy circuit to control the turning on and off of the laser light according to the multi-pulse patterns of the basic cycle of 1T, and stores a 2T pattern table corresponding to a pattern table of the basic cycle of 2T, so that the 2T pattern table enables the write strategy circuit to control the turning on and off of the laser light according to the multi-pulse patterns of the basic cycle of 2T (done by element 13 of figure 10).

Regarding claim 10, Kobayashi et al. teaches the optical disk recording apparatus, according to claim 9, wherein the storage section (element 49 of figure 25) stores a 1T pattern table corresponding to a pattern table of the basic cycle of 1T, so that the 1T pattern table enables the write strategy circuit to control the turning on and off of the laser light according to the basic cycle of 1T, and stores a 2T pattern table corresponding to a pattern table of the basic cycle of 2T, so that the 2T pattern table enables the write strategy circuit to control the turning on and off of the laser light according to the basic cycle of 2T (done by element 13 of figure 10).

Regarding claim 5, Kobayashi et al. teaches the optical disk recording apparatus, wherein the control section performs a first test recording with using the 1T pattern table to evaluate a quality of recording and a second test recording with using the 2T pattern table to evaluate a quality of recording separately from the first test recording before performing an actual recording, and selects one of the 1T pattern table and the 2T pattern table based on the respective qualities evaluated by the first test recording and the second test recording (concept of test recording is taught in column 13, lines 47-59 and column 14, lines 52-64).

Regarding claim 12, Kobayashi et al. teaches the optical disk recording apparatus, wherein the control section performs a first test recording with using the 1T pattern table to evaluate a quality of recording and a second test recording with using the 2T pattern table to evaluate a quality of recording separately from the first test recording before performing an actual recording, and selects one of the 1T pattern table and the 2T pattern table based on the respective qualities evaluated by the first test

recording and the second test recording (concept of test recording is taught in column 13, lines 47-59 and column 14, lines 52-64).

Kobayashi et al. does not explicitly teach the 1T and 2T pattern tables, but rather, different pattern tables that are not specified. However, it would be an obvious modification to use the concept for 1T and 2T pattern tables specifically.

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the concept of test recording with the given cycles as taught by Kobayashi et al. into the system of Ogawa in view of Yokoi et al. The motivation would be to accurately calibrate the laser using values that are given as conventional (column 14, lines 45-51 of Kobayashi et al.).

Allowable Subject Matter

6. Claims 4 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art of record taken individually or in combination fails to disclose dynamically setting the selected pattern table in the write strategy circuit based on the monitored change of the recording speed. The closes prior art, Sasa et al., US Patent 7,061,847 discloses linearly varying the write power of pulses in accordance with the linear speed.

Response to Arguments

7. Applicant's arguments with respect to the claimed invention have been considered, but are not persuasive or are moot in view of the new grounds of rejection.

Applicant contends that Ogawa does not teach using multiple pulses for forming a single pit. However, Yokoi is cited to teach this feature. Applicant further asserts that Yokoi does not specifically teach the plurality of pattern tables, however, Ogawa is relied on to teach this feature.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Parul Gupta whose telephone number is 571-272-5260. The examiner can normally be reached on Monday through Thursday, from 9:30 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Korzuch can be reached on 571-272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PHG
12/7/07

/William Korzuch/
SPE, Art Unit 2627